



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/618,190	07/11/2003	Vasudha Ramnath	212/498	4287
23371	7590	11/20/2007	EXAMINER	
CROCKETT & CROCKETT 24012 CALLE DE LA PLATA SUITE 400 LAGUNA HILLS, CA 92653			SALL, EL HADJI MALICK	
		ART UNIT	PAPER NUMBER	
		2157		
		MAIL DATE	DELIVERY MODE	
		11/20/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/618,190	RAMNATH ET AL.	
	Examiner El Hadji M. Sall	Art Unit 2157	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 07 September 2007.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-20 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date: _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date: _____	5) <input type="checkbox"/> Notice of Informal Patent Application
	6) <input type="checkbox"/> Other: _____

***DETAILED ACTION***

1. This action is responsive to the correspondence filed on September 7, 2007. Claims 1-20 are pending. Claims 1-20 represent method and system for enabling data to be stored in a computer network; a method and a system for storing data in a computer network.

2. ***Claim Rejections - 35 USC § 102***

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000.

Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1-20 are rejected under 35 U.S.C. 102(e) as being unpatentable over Karol U.S. 6,628,617.

Karol teaches the invention as claimed including technique for internetworking traffic on connectionless and connection-oriented networks (see abstract).

As to claims 1, 10, 16 and 18, Karol teaches a method and a system for enabling storage of data in a computer network comprising a plurality of computer nodes, wherein each computer node comprises at least one connection oriented link layer unit, the method comprising the steps of:

defining a looping path in the computer network, wherein the looping path comprises a plurality of computer nodes and connections between the computer nodes (figure 1); and

configuring a connection unit at each node along the looping path, the connection unit being supported by the connection oriented link layer unit (column 3, lines 58-66),

such that the connection oriented link layer unit at each computer node is able to send incoming data which is to be stored in the computer network to a next computer node along the looping path based on the connection unit, thereby providing the looping path for data to be circulated therein, and thereby enabling the storage of data in the

computer network (figure 4).

As to claims 2 and 11, Karol teaches the method for enabling the storage of data in a computer network according to claim 1, wherein the connection oriented link layer unit is implemented according to a generalized Multi-protocol Label Switching specification (column 2, line 52):

As to claim 3, Karol teaches the method for enabling the storage of data in a computer network according to claim 1, wherein a signaling framework is supported by the connection oriented link layer unit at each computer node and is implemented by a signaling protocol running on the nodes (column 5, line 66 to column 6, line 2).

As to claim 4, Karol teaches the method for enabling the storage of data in a computer network according to claim 3, wherein the connection unit at each computer node of the computer network is configured by a signaling message generated by the signaling protocol running on the computer nodes of the computer network (column 2, lines 45-51; column 3, lines 58-66).

As to claim 5, Karol teaches the method for enabling the storage of data in a computer network according to claim 1, further comprising the step of setting an attribute of the connection unit at each computer node of the looping path, wherein the attribute of the connection unit is used to identify the created path as a looping path for

storing data (column 19, lines 25-35).

As to claim 6, Karol teaches the method for enabling the storage of data in a computer network according to claim 5, wherein the attribute of the connection unit at each computer node of the looping path is set by a signaling message generated by a signaling protocol running on the computer nodes of the computer network (column 2, lines 45-51).

As to claim 7, Karol teaches the method for enabling the storage of data in a computer network according to claim 6, further comprising steps of identifying the looping path in the computer network by determining whether an attribute of the signaling message is set (column 2, lines 45-51); and

preventing the identified looping path from being aborted by the signaling protocol running on the computer nodes of the computer network when the attribute of the signaling message is set to the predefined value (column 4, lines 20-24).

As to claims 8, Karol teaches the method for enabling the storage of data in a computer network according to claim 7, wherein a further attribute of the signaling message having a value which is being incremented at each computer node along the looping path is set to a predefined value at least a predefined computer node of the looping path (column 10, lines 3-15).

As to claim 9, Karol teaches the method for enabling the storage of data in a computer network according to claim 7, wherein a further attribute of the signaling message having a node identifier of each computer node being added to it at the respective computer node of the looping path is set to a predefined value at least a predefined node of the looping path (column 10, lines 3-15).

As to claim 12, Karol teaches the method for storing data in a computer network according to claim 10, further comprising the steps of:

affixing a header to each data packet of the data to be injected into the identified looping path at the node, wherein the header is associated with the identified looping path (column 6, lines 40-50);

determining a forwarding path information of the header affixed to the data packet by the connection oriented link layer unit at the computer node (figure 5); and

affixing further a connection oriented link layer header to the data packet affixed with the header by the connection oriented link layer unit at the computer node, wherein the connection oriented link layer header comprises an outgoing label which maps the data packet into the identified looping path, thereby storing the data in the computer network (figure 5).

As to claim 13, Karol teaches the method for storing data in a computer network according to claim 12, wherein a time to live field of the connection oriented link layer header having a value which is being decremented at each computer node is set to a

Art Unit: 2157

predefined value by the unit at least one computer node along the identified looping path (column 10, lines 3-15).

As to claim 14, Karol teaches the method for storing data in a computer network according to claim 10, wherein data stored in the looping path of the computer network is removed by setting an administrative bit in a signaling message generated by a signaling protocol running on the computer nodes of the computer network to a predefined value (column 6, lines 38-40); and

sending the signaling message to a computer node along the looping path, thereby setting an administrative attribute of a connection unit at the computer node and causing the computer node to remove the data stored in the looping path of the computer network (column 6, lines 44-50).

As to claim 15, Karol teaches the method for storing data in a computer network according to claim 10, wherein data stored in the looping path of the computer network is read by sending an experimental message generated by a signaling protocol running on the computer nodes of the computer network to a computer node along the looping path, thereby setting a duplicate attribute of a connection unit at the computer node and causing the computer node to duplicate the data stored in the looping path of the computer network (column 10, lines 51-67).

As to claim 17, Karol teaches the system for enabling storage of data in a

computer network according to claim 16, wherein the connections between computer nodes are optical fibers (column 6, lines 7-10).

As to claim 19, Karol teaches a system for storing of data in a computer network according to claim 18, each computer node further comprises a removal unit for removing the injected data in the looping path when an administrative attribute of a connection unit is set, thereby causing the computer node to remove the data stored in the looping path of the computer network (column 6, lines 38-50)

As to claim 20, Karol teaches a system for storing of data in a computer network according to claim 18, each computer node further comprises a retrieval unit for duplicating the injected data in the looping path when a duplicate attribute of a connection unit is set, thereby causing the computer node to retrieve the data stored in the looping path of the computer network (column 10, lines 51-67).

**4. *Response to Arguments***

Applicant's arguments filed 09/07/07 have been fully considered but they are not persuasive.

(A) Applicant argues that Karol does not teach the routing of data in such way that the data can be stored in the network.

In regards to the point (A), Examiner respectfully disagrees.

Column 6, lines 51-64, Karol discloses the internal arrangement of CL-CO gateway 140 in accordance with the present invention. Generally speaking, each CL-CO gateway arranged in accordance with the present invention includes hardware and software modules that typically comprise (a) a switch fabric for CO networking, shown in FIG. 4 as CO switch 410, (b) a CL packet forwarding engine (i.e. "routing of data"), shown in FIG. 4 as CL router/switch 420, (c) a protocol converter 450, (d) a moderately sized packet buffer 440 for temporarily storing packets (i.e. "data can be stored in the network") waiting for CO network setup or turnaround; and (e) a processor 430 and associated database 431 for controlling the gateway packet handling operations and for storing forwarding, flow control, header translation and other information. Therefore, Karol explicitly teaches "the routing of data in such way that the data can be stored in the network".

(B) Applicant argues that the claimed system represents a significant departure from Karol, and performs its functions contrary to the teaching of Karol. Accordingly, the claims are neither anticipated by Karol nor suggested Karol.

In regards to the point (B), Examiner respectfully disagrees.

The Examiner kindly submits that the applicant(s) misread the applied references used in the rejection. Actually, applicants are interpreting the claims very narrow by considering the broad teaching of the references used in the rejection. The aforementioned assertion wherein "the claimed system represents a significant

Art Unit: 2157

departure from Karol, and performs its functions contrary to the teaching of Karol", was unsupported by objective factual evidence and was not found to be of substantial evidential value. For this assertion to have merit, it is important to applicants to provide some forms of evidence that convincingly show that Examiner's references do not meet the claims language. Furthermore, Applicants are reminded that 37 CFR 1.111(b) states, "a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references does not comply with the requirement of this section". Thus, applicants' assertions are just mere allegation with no supported fact by failing to specifically point out how the language of the claims patentably distinguished them from the cited references. Applicants are reminded that the Examiner is entitled to the broadest reasonable interpretation of the claims. The Applicants always have the opportunity to amend the claims during prosecution and broad interpretation by the Examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. In re Prater 162 USPQ 541, 550-51 (CCPA 1969). Hence, the rejection under 35 U.S.C 102(e) is hereby sustained.

5.

*Conclusion*

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner. In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to El Hadji M Sall whose telephone number is 571-272-4010. The examiner can normally be reached on 8:00-4:30.

Art Unit: 2157

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on 571-272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EI Hadji Sall  
Patent Examiner  
Art Unit: 2157



ARIO ETIENNE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100